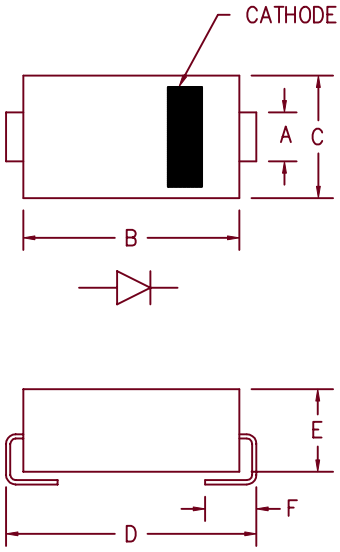
# Ultra Fast Recovery Rectifiers

# ERIM




| Dim. | Inches | | Millimeter | | |
|---|---|---|---|---|---|
| | Minimum | Maximum | Minimum | Maximum | Notes |
| A | .073 | .087 | 1.85 | 2.21 | |
| B | .160 | .180 | 4.06 | 4.57 | |
| C | .130 | .155 | 3.30 | 3.94 | |
| D | .205 | .220 | 5.21 | 5.59 | |
| E | .075 | .130 | 1.91 | 3.30 | |
| F | .030 | .060 | .760 | 1.52 | |

DO–214BA Package

| Microsemi Catalog Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|---|---|---|
| ERIM | 1000V | 1000V |

- Ultra Fast Recovery
- 150°C Junction Temperature
- 1 Amp Current Rating
- $t_{RR}$ 75nS Max.

## Electrical Characteristics

| | | |
|---|---|---|
| Average forward current | $I_{F(AV)}$ 1.0 Amps | $T_A$ = 75°C |
| Maximum surge current | $I_{FSM}$ 30 Amps | 8.3ms, half sine, $T_J$ = 175°C |
| Max peak forward voltage | $V_{FM}$ 1.25 Volts | $I_{FM}$ = 1.0A; $T_J$ = 25°C* |
| Max reverse recovery time | $t_{RR}$ 75 nS | 1/2A, 1A, 1/4A, $T_J$ = 25°C |
| Max peak reverse current | $I_{RM}$ 5 µA | $V_{RRM}$, $T_J$ = 25°C |
| Typical junction capacitance | $C_J$ 45 pF | $V_R$ = 4V, $T_J$ = 25°C |

*Pulse test: Pulse width 300 µsec, Duty cycle 2%

## Thermal and Mechanical Characteristics

| | | | |
|---|---|---|---|
| Storage temperature range | $T_{STG}$ | −55°C to 150°C | |
| Operating junction temp range | $T_J$ | −55°C to 150°C | |
| Maximum thermal resistance | $R_{\theta JL}$ | 15°C/W | Junction to lead |
| Weight | | .0047 ounces (.013 grams) typical | |

1–10–02 Rev. IR

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Figure 1
Typical Forward Characteristics

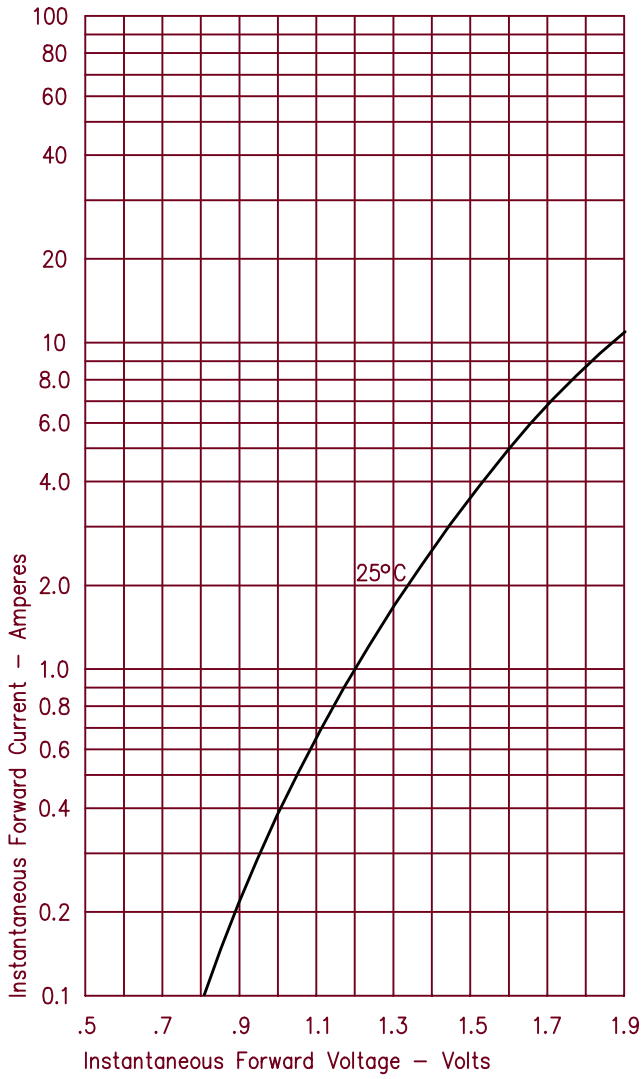


Figure 2
Typical Reverse Characteristics

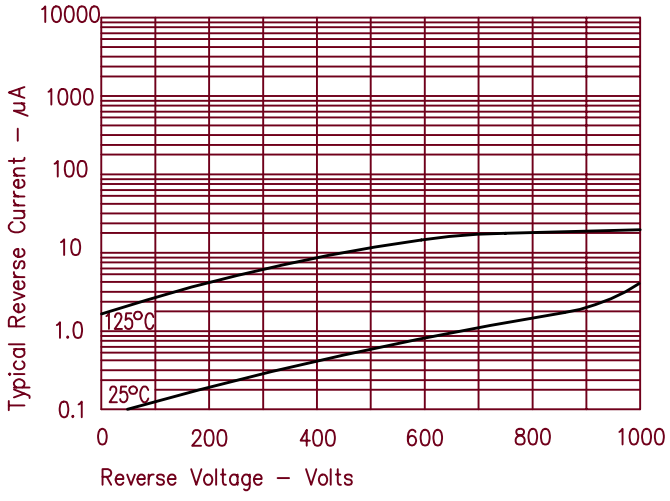


Figure 3
Typical Junction Capacitance